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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,281	09/22/2000	Johannes Edenhofer	GR 99 P 2886 US	1198

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EXAMINER
TA, THO DAC

ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/667,281	Applicant(s) EDENHOFER ET AL.	
	Examiner Tho D. Ta	Art Unit 2833	

-- Th MAILING DATE of this communication appears n the cover sh et with the correspondence address --

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7-12 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7-12 and 17-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 5/8/02 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *17* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 7-11, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinkaid (3,264,599) in view of Wanger et al. (5,280,467).

Kinkaid discloses a plug-in connector comprising: a plastic member 2 and contact pins 12 embedded in the plastic member 2.

However, Kinkaid's plastic member 2 does not include a material being a mixture of a plastic and a carbon powder, having conductive properties in order to prevent electrostatic discharge. Thus, Kinkaid's plastic member 2 is susceptible to electrostatic discharge which cause damage to sensitive electronic components during mating with a mating connector 6.

Wanger et al. teaches the use of thermoplastics such as polypropylene (crystalline component) which have been impregnated with carbon powder (non-crystalline component), e.g. 8-12 percent carbon powder (column 6, lines 44-64) in order to allow dissipation of static electricity to prevent damaging static discharge into sensitive electronic components (column 3, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kinkaid invention by constructing the plastic

member 2 as taught by Wanger et al. in order to protect the sensitive electronic components (mounted on PCB 4) from damage due to electrostatic discharge during mating with connector 6.

3. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinkaid and Wanger et al. as applied to claims 1 and 11 above, and further in view of Bauer (5,161,991).

Kinkaid as modified by Wanger et al. has been discussed above.

Kinkaid does not an electrically conductive plate which is attached to the bottom side of the plastic member 2 and there is a spacing distance between the plate and the pin 18 (the portion of the pin which extending from the plastic member 2 for mounting to PCB 4).

Bauer discloses an electrically conductive plate 22 which is attached to the bottom side of the plastic member 12 and there is a spacing distance 24 between the plate and the pin 18 (the portion of the pin which extending from the plastic member 2 for mounting to PCB) in order to provide an ESD protection (columns 1 and 2)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Kinkaid invention by constructing the plastic member 2 as taught by Bauer in order to provide an additional ESD protection device and to protect the sensitive electronic components (mounted on PCB 4) from damage due to electrostatic discharge during mating with connector 6.

R spons to Argum nts

4. Applicant's arguments filed 5/28/03 have been fully considered but they are not persuasive.

In response to applicant's argument that "In an automatic changer for optical disks, the risk of errors caused by electrostatic charge is to be minimized. Therefore, a person of ordinary skill in the art dealing with electrical plug-in connectors would not consult the Wanger reference, which pertains to a housing for optical disks.". First of all, Examiner thanks Applicant for recognizing that the Wanger reference also concerns about "the risk of errors caused by electrostatic charge". Secondly, the risk of errors caused by electrostatic charge in Wanger is to be minimized or maximized is irrelevant as long as Wanger has the same problem solving as in applicant invention. Thus, the reason to combine references is the same as applicant's.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, at best understood, the basic concept of the claimed invention is adding a material being a mixture of a plastic and a carbon powder, having conductive properties into a plastic

housing in order to prevent electrostatic discharge. Kinkaid discloses generally all that is claimed except for a plastic member having a material being a mixture of a plastic and a carbon powder, having conductive properties in order to prevent electrostatic discharge. Wanger et al. teaches the use of thermoplastics such as polypropylene (crystalline component) which have been impregnated with carbon powder (non-crystalline component), e.g. 8-12 percent carbon powder (column 6, lines 44-64) in order to allow dissipation of static electricity to prevent damaging static discharge into sensitive electronic components (column 3, lines 55-59). Thus, since Wanger et al. solves the problem in substantially the same as applicant, the combination of the cited references are proper and analogous.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (703) 308-0800. The examiner can normally be reached on M-F (8:00-5:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

THO D. TA
PRIMARY EXAMINER

tdt
August 9, 2003